UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,743	01/10/2002	Scott James Weaver	9288 (3225-130)	3989

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EXAMINER
VU, TUAN A

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/041,743	WEAVER, SCOTT JAMES
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 November 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _17-33_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _17-33_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   This action is responsive to the application filed 11/17/2005.

Claims 1-16 have been canceled; and claims 17-33 are newly added and now submitted

for examination.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 32-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter.

> The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a " useful, concrete, and tangible result" be accomplished. An "abstract idea" when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a "useful, concrete and tangible result".

Claim 32 recites a computer-implemented system comprising a data wedge including a

first schema and a second schema, and configured to translate data from one form to another

form in accordance to some schema. As construed, this system is described as comprising

software entities having schema and used for a translation scheme, which is also perceived, from

scanning the specifications, as being done via software execution. The claim therefore amounts

to no tangible support to embody the software components as recited; and absent any tangible

media to store the software entities, the claim fails the practical application test for not providing

a tangible device which would enable the realization of a possible result, e.g. a tangible and

useful result. Besides, the claim only describes non-functional elements (data wedge with

schema) which is perceived as possibly able to perform an action (e.g. "data wedge ...

configured to translate ... ", i.e. not actually translating) such that there is no teaching of any

action being actually taken to yield a concrete result. Hence, the claim amounts to a non-

practical concept or an abstract idea; and is rejected for leading to non-statutory subject matter.

Claim 33 is also rejected for not remedying to the defects of claim 32.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 17, 19-25, and 27-32 are rejected under 35 U.S.C. 102(e) as being anticipated by

Mestre et al., USPubN: 2004/0015834 (hereinafter Mestre).

As per claim 17, Mestre discloses a method of translating data from a data format of a

first software component to a format of a data model of a second software component, the

method comprising the steps of:

creating a first schema (e.g. XMI – para 0078; *XML that describes the model* – para

0105) comprising the model of the first software component (e.g. *Java 12, SQL 14, XML 16* –

para 0078 – Note: any one of these types can be first software); integrating the first schema into a

data wedge (e.g. *Constructor 46, Generator 36, Generator 46* – para 0087-00103; Fig. 2-4;

GraphModel - para 0093 – Note: a graphical representation of data from the generator of XIDL

reads on data wedge);

creating a second schema (e.g. *Java 12, SQL 14, XML 16* – para 0078, para 0080 – Note:

any one of these types being fetched as a XML input file representing a model reads on second

schema with the first schema being any of the other types); integrating the second schema into a

data wedge (e.g. *GraphModel* – para 0093; Graphs - para 0091); integrating the second schema

into a data wedge (e.g. Fig. 2-4 – Note: any of the other type being input XML for conversion

framework reads on integrating second schema into a data wedge, the tool to provide conversion

language reading on data wedge);

populating a data model of the first software component (e.g. *XIDL,* para 0088-0089;

step 34, 36, 10 - Fig. 2; para 0091 – Note: populated a graph with data from a fetched model

reads on populating a model);

translating data elements in the data model from a first format of the first software

component schema to a second format of the second software component (e.g. *convert one type*

to another – para 0078; Fig. 1; *XML to Java, SQL to Java, XML to SQL* ...- para 0078; *any*

conversion between them – para 0079).

As per claim 19, Mestre discloses marshalling of code being converted(para 0027, para

0096-0101) hence has disclosed reading translated data by the second software component.

As per claim 20, Mestre discloses removing and updating elements from a model (para

0100, 0101)

As per claim 21, Mestre discloses creating an instance of a data wedge (e.g. Fig. 1, step

26, 28 – Note: a runtime conversion scheme reads on instance of a data wedge).

As per claim 22, Mestre discloses name of a data wedge for each XIDL (para 0093, pg.

3), hence has disclosed including name of data wedge.

As per claim 23, Mestre discloses setting default value and default data elements for the data model (see *Rationale Rose* – para 0078, 0080, 0086 – Note: Rationale Rose tool provide empty structure for developer to instantiate with customized name and values, hence icon/diagram with default settings is integral to Case tools with template diagram like Rationale Rose)

As per claim 24 Mestre discloses modifying a data element in the data model of the first software component (e.g. *easy to edit* – para 0079; para 0100, 0101).

As per claim 25, Mestre discloses a computer system for translating data from a data format of a first software component to a format of a data model of a second software component; comprising a processor; a memory coupled to said processor (para 0071-0074); the memory having stored therein data and sequences of instructions which, when executed by said processor, cause said processor to integrate software components by causing the processor to:

create a first schema of the first software component,

integrate the schema into a data wedge,

create a second schema of the second software component, integrate the second schema into a data wedge;

populate a data model of the first software component, and

translate data elements in the data model from a first format of a first software component schema to a second format of a second software component; all of these steps having been addressed in the corresponding rejection thereof in claim 1.

As per claims 27-31, these claims correspond to claims 20, 21, 24, 22 and 23 respectively; and are rejected with the corresponding rejections as set forth therein.

As per claim 32, Mestre discloses a computer implemented system for translating data

from a data format of a first software component to a format of a data model of a second

software component, the system comprising:

a data wedge (e.g. Fig. 2-4; *GraphModel* - para 0093) including a first schema of the

first software component (e.g. *Java 12, SQL 14, XML 16* – para 0078 - Note: any one of these

types being fetched as a XML input file representing a model reads on first schema --with the

first schema of any of the other types) and a second schema of the second software component

(*Java 12, SQL 14, XML 16* – para 0078 -- Note: any one of these language types being fetched as

a XML input file representing a model reads on second schema with the first schema being any

of the other types), the wedge configured to translate a data element from the first data view in

accordance with the first schema to the second data view in accordance with the second schema (

e.g. Fig. 4; *convert one type to another* – para 0078; Fig. 1; *XML to Java, SQL to Java, XML to*

SQL ...- para 0078; *any conversion between them* – para 0079).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 18, 26, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Mestre et al., USPubN: 2004/0015834 as applied to claims 17, 25, and 32 respectively from

above.

As per claim 18, Mestre discloses triggering of messages passing for unmarshaling

purposes with emphasis on reuse of code (para 0105) as well as reducing time in a paradigm of

client-server fast code request (para 0004-0029; *commonly used protocols* - para 0004) but does

not explicitly disclose triggering an event to notify the second software component of translated

data element availability. For client environment requesting a particular type of code (e.g. *SQL,*

XML, JAVA, C++ as purported in Mestre's method – see para 0078/bottom, para 0102-0103),

the desirability to be informed via messages (under HTTP or TCP/IP protocols like hand-shake)-

- message that a converted format exists or is available for use-- is a necessarily part of the

client-server paradigm thus taught by Mestre in view of Mestre's approach to expediting code

providing or for fulfilling a request of server code. Using event like messages to inform the

client's second software (say SQL environment) to be aware that SQL-converted code from say

XML-based input would be strongly suggested from the above paradigm; hence it have been

obvious for one of ordinary skill in the art at the time the invention was made to provide

notification event like message passing in Mestre's client-server paradigm for the target client (

or 2nd software) to acknowledge of the translated code (from the first software) as purported by

Mestre, so that the client can be aware of such translated code and proceed on expediting the

marshalling/un-marshalling of such deliverable based on the intention by Mestre (see para 0095-

0101).

As per claim 26, this claim contains the same subject matter of claim 18; hence

incorporates the same rejection as set forth therein.

As per claim 33, this claim contains the same subject matter of claim 18; hence

incorporates the same rejection as set forth therein.

Response to Arguments

8.   Applicant's remarks with respect to claim 1-16 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The

examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kakali Chaki can be reached on (571)272-3719.

The fax phone number for the organization where this application or proceeding is

assigned is (571) 273-3735 (for non-official correspondence – please consult Examiner before

using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
January 28, 2006

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